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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,208	04/11/2001	Takahiro Yoshida	016886/0183	4216

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EXAMINER

DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,208

Applicant(s)

YOSHIDA ET AL.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-22 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-22 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Arguments

Claims 20-22 and 30-32 are pending in this application.

Applicant's arguments filed August 10, 2006 have been fully considered but are deemed moot in view of the following new grounds of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., the incorporation of "*perform only communication signal processing from layer 1 to a layer 2 of an OSI layer*", "*constructing maintenance data instructing the maintenance test processing to the other of said LAN connecting devices with the signal of the layer 2 of the OSI layer so as to perform the maintenance test processing different from signal of said second input/output wavelength to said optical collector*", "*distributing/outputting the separated first input/output wavelength and the second input/output wavelength*", "*used in alarm communication for notifying alarm information obtained in failure monitoring processing*" and "*different from said LAN...constructing the power-off information obtained by said power-state monitoring processing with an intermittent pattern of the signal of the layer 2 of the OSI layer so that a power...*") to the claims which significantly affected the scope thereof (See amendments filed, August 10, 2006).

DETAILED ACTION

Specification

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to make and use the invention, i.e., failing to provide an enabling disclosure.

The test to be applied under the written description portion of 35 U.S.C. § 112, first paragraph, is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of later claimed subject matter. Vas-Cat, Inc. v. Mahurkar, 935 F. 2d 1555, 1565, 19 USPQ2d 111, 1118 (Fed. Cir. 1991), reh'rg denied (Fed. Cir. July 8, 1991) and reh'rg, en banc, denied (Fed. Cir. July 29, 1991).

The applicants have failed to provide an enabling disclosure in the detailed description of the embodiment. The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to support the subject matter set forth in these claims.

Claim 20 recites:

A system for performing a maintenance test between LAN connecting devices in which a plurality of LAN connecting devices that perform only communication signal processing from layer 1 to a layer 2 of an OSI layer...constructing maintenance data instructing the maintenance test processing to the other of said LAN connecting devices with the signal of the layer 2 of the OSI layer so as to perform the maintenance test processing data in the optical signal of said second input/output wavelength to said optical collector...by the signal of the layer 2 of the OSI layer.

However, the specification merely describes the process and system for performing the test of communication in an optical network (see Abstract, see the Best mode for carrying out the invention, i.e. specification, page 13 to page 23).

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The disclosure simply fails to teach or suggest “performing only communication signal processing from layer 1 to a layer 2 of an OSI layer and test processing to other LAN connecting devices with the signal of the layer 2 of the OSI layer”. In other words, layer 1 and layer 2 are not even described in the specification (see pages 13-23). Hence, the above claimed limitations presents the subject matter situations that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is advised to amend the claims in light of the specification, specifically, pages 13-26 of the best mode as disclosed.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 20-22 and 30-32 are rejected under 35 U.S.C. 112, first paragraph, for the same reasons as set forth in the specification above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 20-21 and 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Darcie et al. (hereinafter Darcie, US 5,907,417).

As per claim 20, Darcie discloses a system for performing a maintenance test a maintenance test between LAN connecting devices in which a plurality of LAN connecting devices that perform only communication signal processing from layer 1 to a layer 2 of an OSI layer are connected to each other through a circuit using an optical fiber as a physical medium configured such that communication is possible between the LAN connecting devices using an optical signal of a first input/output wavelength used in ordinary LAN communication and an optical signal of a second input/output wavelength used in maintenance test communication relating to communication on said circuit connecting the LAN connecting devices to each other (fig. 1, fig. 3, fig. 4 and col. 2 L57 to col. 3 L21),

wherein one of the said LAN connecting device comprises:

- an optical multiplexer for collecting/multiplexing the optical signal of said first input/output wavelength and the optical signal of said second input/output wavelength and transmitting the collected optical signals to said circuit (col. 1 L40-67, fig. 1, 3, 4);

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- a first communication data control part for performing ordinary LAN communication processing and outputting the communication data outputted by the LAN communication processing in the optical signal of said first input/output wavelength to said optical multiplexer (col. 3 L40-67); and
- a first maintenance data control part for constructing maintenance data instructing the maintenance test processing to the other of said LAN connecting devices with the signal of the layer 2 of the OSI layer so as to perform the maintenance test processing different from said LAN communication processing and outputting the maintenance data in the optical signal of the said second input/output wavelength to said optical collector (col. 3 L40-67 and fig. 1), and

wherein the other of said LAN connecting devices comprises:

- an optical demultiplexer for separating/demultiplexing the optical signal transmitted by said circuit to said first input/output wavelength and said second input/output wavelength and the distributing/outputting the separated first input/output wavelength and the second input/output wavelength (col. 1 L40-67, fig. 1, 3, 4, col. 4 L12-27);
- a second communication data control part for performing the ordinary LAN communication processing by input of said communication data in the optical signal of said first input/output wavelength

distributed/outputted by said optical demultiplexer (col. 4 L12-44, col. 5 L5-60); and

- a second maintenance data control part for performing the maintenance test processing of the device itself by input of said maintenance data constructed by the signal of the layer 2 of the OSI layer by the optical signal of said second input/output wavelength distributed/outputted by said optical demultiplexer (col. 6 L37-67 and fig. 1),

wherein said LAN connecting device performs the maintenance test processing by communication by the optical signal of the said second input/output wavelength of said maintenance data constructed by the signal of the layer 2 of the OSI layer (col. 6 L37-67, col. 7 L16-67 and fig. 3).

As per claim 21, Darcie discloses a system for performing a maintenance test a maintenance test between LAN connecting devices in which a plurality of LAN connecting devices that perform only communication signal processing from layer 1 to a layer 2 of an OSI layer are connected to each other through a circuit using an optical fiber as a physical medium configured such that communication is possible between the LAN connecting devices using an optical signal of a first input/output wavelength used in ordinary LAN communication and an optical signal of a second input/output wavelength used in alarm communication for notifying alarm information obtained in failure monitoring processing on said circuit connecting the LAN connecting devices to each other (fig. 1, fig. 3, fig. 4 and col. 7 L16-67),

wherein one of the said LAN connecting device comprises:

- an optical multiplexer for collecting/multiplexing the optical signal of said first input/output wavelength and the optical signal of said second input/output wavelength and transmitting the collected optical signals to said circuit (col. 1 L40-67, fig. 1, 3, 4);
- a first communication data control part for performing ordinary LAN communication processing and outputting the communication data outputted by the LAN communication processing in the optical signal of said first input/output wavelength to said optical multiplexer(col. 3 L40-67); and
- a first maintenance data control part for performing monitoring processing different from the ordinary LAN communication processing, constructing alarm information obtained by said failure monitoring processing with an intermittent pattern of the signal of the layer 2 of the OSI layer so that a failure content can be identified, and outputting the alarm information in the optical signal of said second input/output wavelength to said optical multiplexer (col. 3 L40-67 and fig. 1), and

wherein the other of said LAN connecting devices comprises:

- an optical demultiplexer for separating/demultiplexing the optical signal transmitted by said circuit to said first input/output wavelength and said second input/output wavelength and the distributing/outputting the separated first input/output wavelength and the second input/output wavelength (col. 1 L40-67, fig. 1, 3, 4, col. 4 L12-27);

- a second communication data control part for performing the ordinary LAN communication processing by input of said communication data in the optical signal of said first input/output wavelength distributed/outputted by said optical demultiplexer (col. 4 L12-44, col. 5 L5-60 and fig. 1); and
- a second maintenance data control part for performing said failure monitoring processing by input of said alarm information constructed with the intermittent pattern of the signal of the layer 2 of the OSI layer by the optical signal of said second input/output wavelength distributed/outputted by said optical multiplexer (col. 6 L37-67 and fig. 1),

wherein said LAN connecting device performs said failure monitoring processing by communication of said alarm information constructed by the intermittent pattern of the signal of the layer 2 of the OSI layer (col. 7 L6-67).

As per claims 30-31, they do not teach or further define over the limitations in claims 20-21. Therefore claims 30-31 are rejected for the same reasons as set forth in claims 20-21.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 22 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darcie et al. (hereinafter Darcie, US 5,907,417) in view of Hawley (US 5,523,868).

As per claim 22, Darcie discloses a system for performing a maintenance test a maintenance test between LAN connecting devices in which a plurality of LAN connecting devices that perform only communication signal processing from layer 1 to a layer 2 of an OSI layer are connected to each other through a circuit using an optical fiber as a physical medium configured such that communication is possible between the LAN connecting devices using an optical signal of a first input/output wavelength used in ordinary LAN communication and an optical signal of a second input/output wavelength used in alarm communication for notifying

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alarm information obtained in failure monitoring processing on said circuit connecting the LAN connecting devices to each other (fig. 1, fig. 3, fig. 4 and col. 7 L16-67),,

wherein one of the said LAN connecting device comprises:

- an optical multiplexer for collecting/multiplexing the optical signal of said first input/output wavelength and the optical signal of said second input/output wavelength and transmitting the collected optical signals to said circuit (col. 1 L40-67, fig. 1, 3, 4);
- a first communication data control part for performing ordinary LAN communication processing and outputting the communication data outputted by the LAN communication processing in the optical signal of said first input/output wavelength to said optical multiplexer(col. 3 L40-67); and
- a first maintenance data control part for performing monitoring processing different from the ordinary LAN communication processing, constructing alarm information obtained by said failure monitoring processing with an intermittent pattern of the signal of the layer 2 of the OSI layer so that a failure content can be identified, and outputting the alarm information in the optical signal of said second input/output wavelength to said optical multiplexer (col. 3 L40-67 and fig. 1), and

wherein the other of said LAN connecting devices comprises:

- an optical demultiplexer for separating/demultiplexing the optical signal transmitted by said circuit to said first input/output wavelength and said

second input/output wavelength and the distributing/outputting the separated first input/output wavelength and the second input/output wavelength (col. 1 L40-67, fig. 1, 3, 4, col. 4 L12-27);

- a second communication data control part for performing the ordinary LAN communication processing by input of said communication data in the optical signal of said first input/output wavelength distributed/outputted by said optical demultiplexer(col. 4 L12-44, col. 5 L5-60 and fig. 1); and
- a second maintenance data control part for performing said failure monitoring processing by input of said alarm information constructed with the intermittent pattern of the signal of the layer 2 of the OSI layer by the optical signal of said second input/output wavelength distributed/outputted by said optical multiplexer (col. 6 L37-67 and fig. 1),

wherein said LAN connecting device performs said failure monitoring processing by communication of said alarm information constructed by the intermittent pattern of the signal of the layer 2 of the OSI layer (col. 7 L6-67).

However, Marcie does not disclose the process of monitoring and notifying the power state information of the LAN connecting devices.

Hawley, from the same field of endeavor explicitly discloses the process and apparatus for monitoring and notifying the power state information of the LAN connecting devices in an optical signal (fig. 1, col. 3 L13-67 and col. 4 L25-67, col. 5 L1-29).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Marcie in view of Hawley in order to monitor the power state of the LAN connecting devices and notifying the information obtained in monitoring process.

One of ordinary skilled in the art would have been motivated because the positive indication of a loss of power reduces the uncertainty resulting from an indication of a loss of service (Hawley, col. 2 L10-29). Furthermore, one of ordinary skilled in the art would have been motivated to do so in order to facilitate rapid diagnosis and service restoral (Hawley, col. 2 L1-9).

As per claim 32, it does not teach or further define over the limitations in claim 22. Therefore claim 32 is rejected for the same reasons as set forth in claim 22.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Frigo, Us 5,760,940: Monitoring Optical Path characteristics in an optical communication system.
- b. Cohen et al., US 5,285,305: Optical communication network with PASSIVE MONITORING.
- c. Joline et al., Us 6,005,696: Backhauling test procedures for communication networks. Kosbab, US 5,917,808: Method of identifying device types on a LAN using passive monitoring.

Conclusion

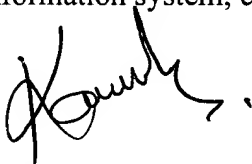
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

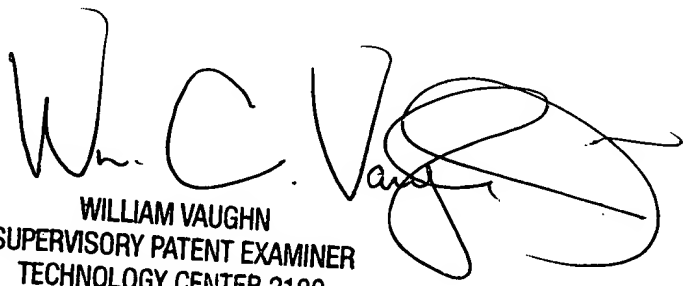
Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kamal Divecha
Art Unit 2151
October 25, 2006.



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